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**REMARKS**

Claims 42 – 44 are pending. Claims 42 - 44 were amended. Claims 45 – 48 are new. Claims 1 - 41 were previously cancelled. No new matter has been added. Reconsideration is requested.

**PERSONAL INTERVIEW AND INTERVIEW SUMMARY**

Applicants wish to thank Examiner Naum Levin and his Supervisor, Jack Chiang, for the personal interview they granted to Applicants' representative, Heidi M. Brun, Reg. No. 34,504, on April 10, 2006.

During the interview, claims 42 – 44 were discussed, as was the citation, Suaya (US 2003/0131334).

Applicants' representative discussed that the transmission line (T-line) models recited in claims 42 and 43 are pre-defined and cover a broad range of frequencies, something that is not true for Suaya. As discussed, Suaya calculates how to make an existing structure operate as a T-line. Suaya did not design the structure because he needed a T-line type response; he merely discovered that an existing structure could be redesigned to operate as a T-line, at one particular frequency. Applicants' representative argued that the present invention, as recited in claims 42 and 43, provides a library of pre-defined T-line models which operate over a wide range of frequencies.

There was a discussion of the broad range of frequencies covered by the models described in the present specification. Applicants' representative pointed to paragraph [0062] which mentions that the frequency range is "over the full bandwidth from DC to the transistor cut-off frequency (100 GHz for SiGe technology)" and noted that such a range is necessary for circuits operating on analog and mixed signals. There was a discussion that the T-line models described in the present specification include frequency dependent parameters, such as inductance and resistance (paragraph [0064]), something not present in Suaya. Suaya, instead, provides calculations for inductance and resistance at a particular frequency.

The Examiners questioned how the T-line models incorporated a model of a DC response. Applicants' representative indicated that, since the text indicates (see

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paragraph [0064]) that the models consist of several RLC segments, the DC response could be a separate one of the segments. Applicants note here that the parameters at DC are for resistance and capacitance only.

The Examiners indicated that, for claim 42, the term –library-- (as opposed to ‘set’) may more clearly indicate the fact that the models are pre-defined.

### **CLAIM OBJECTIONS**

Claim 44 was objected as being of improperly dependent on cancelled claim 4. Claim 44 has been amended to be dependent from claim 42.

### **CLAIM REJECTIONS**

Claims 42 – 44 have been rejected under 35 USC 102(e) as being unpatentable by Suaya et al.

The arguments presented in the Interview with respect to Suaya have been presented above. It is noted here that Suaya does not show, nor suggest:

“when designing an analog and mixed signal integrated circuit, selecting one of a library of pre-defined transmission line topologies for critical interconnect lines”

as recited in amended claim 42, nor does Suaya show “An integrated circuit design library” with transmission line models, as recited in claim 43.

Furthermore, as discussed in the interview, Suaya does not show nor suggest that “at least an inductance parameter of each said transmission line topology is a function of frequency”, as recited in new claims 45 and 46. Instead, Suaya calculates the inductance for the particular clock frequency expected on his clock trees.

Finally, as discussed in the interview, Suaya does not show nor suggest a frequency range from “DC to a transistor cut-off frequency” as recited in new claims 47 and 48.

Accordingly, Applicants respectfully assert that amended independent claims 42 and 43 are allowable. Claim 44 and new claims 45 – 48 depend from, directly or indirectly, claims 42 and 43, and therefore include all the limitations of those claims. Therefore, Applicants respectfully assert that claims 44 – 48 are likewise allowable.

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Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to claims 42 – 44.

Applicants believe that the above amendments and remarks are fully responsive to all the objections and grounds of rejections by the Examiner. In view of the foregoing amendments and remarks, the Applicants respectfully submit that all the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Please charge any fee associated with this paper to deposit account No. 09-0468.

Respectfully submitted,

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